WHAT IS CLAIMED IS:

1. An apparatus for determining a relative direction of radiation comprising:

a window system for transmitting the radiation, the window system having a window system optical axis, the window system having Fresnel transmittance properties, the window system being configured such that if the radiation is parallel to the window system optical axis, the radiation is incident upon a surface of the window system at a boresight angle such that an instantaneous rate of change of the Fresnel transmittance as a function of angle of incidence at the boresight angle is significantly different from zero;

three or more radiation detectors for detecting the radiation, the radiation detectors being positioned relative to the window system so as to receive the radiation after transmission of the radiation through the window system, each of the radiation detectors generating a respective detection signal; and

a processor for processing the respective detection signals, the processor being adapted to determine the relative direction of the radiation in two orthogonal directions with respect to the window system optical axis based upon the respective detection signals.

2. An apparatus in accordance with claim 1, wherein a thickness of the window system perpendicular to the window system optical axis varies along the window system optical axis.

3. An apparatus in accordance with claim 2, wherein the thickness of the window system perpendicular to the window system optical axis varies linearly.

4. An apparatus in accordance with claim 1, further comprising a lens system, the lens system for focusing the radiation on the radiation detectors, the lens system being located between the window system and the radiation detectors.

5. An apparatus in accordance with claim 1, further comprising a field of view limiter for limiting a field of view of the radiation detectors.

6. An apparatus in accordance with claim 5, wherein the field of view limiter is selected from the group consisting of light tubes, light baffles, and irises.

7. An apparatus in accordance with claim 1, wherein each of the radiation detectors is adapted to detect an optical monopulse.

8. An apparatus in accordance with claim 1, wherein each of the radiation detectors includes an optical bandwidth filter for transmitting a wavelength corresponding to the radiation, the optical bandwidth filter for substantially blocking wavelengths not corresponding to the radiation.

9. An apparatus in accordance with claim 1, wherein the Fresnel transmittance at the boresight angle is 90 percent or less.

10. An apparatus in accordance with claim 1, wherein the Fresnel transmittance at the boresight angle is 80 percent or less.

11. An apparatus in accordance with claim 1, wherein the Fresnel transmittance at the boresight angle is 70 percent or less.

12. An apparatus in accordance with claim 1, wherein the boresight angle is at least 60 degrees.

13. An apparatus in accordance with claim 1, wherein the boresight angle is at least 70 degrees.

14. An apparatus in accordance with claim 1, further comprising a dispersion element, the dispersion element being located in the radiation path between the window system and the radiation detectors.

15. An apparatus in accordance with claim 14, wherein the dispersion element is selected from the group consisting of a holographic element, a Fresnel lens element, and a binary optics element.

16. A guidable munition for striking a target designated by radiation, the guided munition comprising:

a body;

control means for controlling a direction of the guidable munition, the control means being responsive to a guidance signal, the control means being attached to the body;

a radome being attached to one end of the body, the radome including a window system for transmitting the radiation, the window system having a window system optical axis, the window system having Fresnel transmittance properties, the window system being configured such that if the radiation is parallel to the window system optical axis, the radiation is incident upon a surface of the window system at a boresight angle such that an instantaneous rate of change of the Fresnel transmittance as a function of angle of incidence at the boresight angle is significantly different from zero;

three or more radiation detectors for detecting the radiation, the radiation detectors for receiving the radiation after transmission of the radiation through the window system, each of the three or more radiation detectors for generating a respective detection signal; and

a processor for processing each of the respective detection signals, the processor being adapted to determine a relative direction of the radiation in two orthogonal directions with respect to the window system optical axis based processing of the respective detection signals, the processor being adapted to generate the guidance signal based upon the relative direction of the radiation with respect to the window system optical axis.

17. A guidable munition in accordance with claim 16, wherein the control means is selected from the group consisting of fins and thrusters.

18. A guidable munition in accordance with claim 16, further comprising a lens system, the lens system for focusing the radiation on the radiation detectors, the lens system being located between the window system and the radiation detectors.

19. A guidable munition in accordance with claim 16, further comprising a field of view limiter for limiting a field of view of the radiation detectors.

20. A guidable munition in accordance with claim 16, wherein each of the radiation detectors is adapted to detect an optical monopulse.

21. A guidable munition in accordance with claim 16, wherein each of the radiation detectors includes an optical bandwidth filter for transmitting a wavelength corresponding to the radiation, the optical bandwidth filter for substantially blocking wavelengths not corresponding to the radiation.

22. A guidable munition in accordance with claim 16, wherein the Fresnel transmittance at the boresight angle is 90 percent or less.

23. A guidable munition in accordance with claim 16, wherein the Fresnel transmittance at the boresight angle is 80 percent or less.

24. A guidable munition in accordance with claim 16, wherein the Fresnel transmittance at the boresight angle is 70 percent or less.

25. A guidable munition in accordance with claim 16, wherein the boresight angle is at least 60 degrees.

26. A guidable munition in accordance with claim 16, wherein the boresight angle is at least 70 degrees.

27. A guidable munition in accordance with claim 16, further comprising a dispersion element, the dispersion element being located in the radiation path between the window system and the radiation detectors.

28. A method for determining a direction of radiation, the method comprising the steps of:

transmitting the radiation through a window system, the window system having a window system optical axis, the window system having Fresnel transmittance properties, the window system being configured such that if the radiation is parallel to the window system optical axis, the radiation is incident upon a surface of the window system at a boresight angle such that an instantaneous rate of change of the Fresnel transmittance as a function of angle of incidence at the boresight angle is significantly different from zero;

detecting the thus transmitted radiation with three or more radiation detectors, each of the radiation detectors thereby generating a respective detection signal; and

processing the respective detection signals, thereby determining the relative direction of the radiation in two orthogonal directions with respect to the window system optical axis.

29. A method in accordance with claim 28, further comprising the step of focusing the radiation on the three or more radiation detectors using a lens system, the lens system being located between the window system and the radiation detectors.

30. A method in accordance with claim 28, further comprising the step of limiting a field of view of the radiation detectors.

31. A method in accordance with claim 28, wherein each of the radiation detectors is adapted to detect an optical monopulse.

32. A method in accordance with claim 28, further comprising the step of filtering the radiation before the step of detecting the thus transmitted radiation, the step of filtering substantially blocking wavelengths not corresponding to the radiation.

33. A method in accordance with claim 28, wherein the Fresnel transmittance at the boresight angle is 90 percent or less.

34. A method in accordance with claim 28, wherein the Fresnel transmittance at the boresight angle is 80 percent or less.

35. A method in accordance with claim 28, wherein the Fresnel transmittance at the boresight angle is 70 percent or less.

36. A method in accordance with claim 28, wherein the boresight angle is at least 60 degrees.

37. A method in accordance with claim 28, wherein the boresight angle is at least 70 degrees.

38. A method in accordance with claim 28, further comprising the step of dispersing the radiation before the step of detecting the thus transmitted radiation.

39. An apparatus for determining a direction of radiation comprising:

a window system for transmitting the radiation, the window system having a window system optical axis, the window system having Fresnel transmittance properties, the window system being configured such that if the radiation is parallel to the window system optical axis, the radiation is incident upon a surface of the window system at a boresight angle such that an instantaneous rate of change of the Fresnel transmittance as a function of angle of incidence at the boresight angle is significantly different from zero;

a radiation detector for detecting the radiation, the radiation detector being positioned relative to the window system so as to receive the radiation after transmission of the radiation through the window system, the radiation detector generating one or more detection signals; and

a processor for processing the one or more detection signals, the processor being adapted to determine the relative direction of the radiation with respect to the window system optical axis based upon the at least one detection signal.

40. An apparatus in accordance with claim 39, further comprising a lens system, the lens system for focusing the radiation on the radiation detector, the lens system being located between the window system and the radiation detector.

41. An apparatus in accordance with claim 39, further comprising a field of view limiter for limiting a field of view of the radiation detector.

42. An apparatus in accordance with claim 39, wherein the radiation detector is adapted to detect an optical monopulse.

43. An apparatus in accordance with claim 39, wherein the radiation detector includes an optical bandwidth filter for transmitting a wavelength corresponding to the radiation, the optical bandwidth filter for substantially blocking wavelengths not corresponding to the radiation.

44. An apparatus in accordance with claim 39, wherein the Fresnel transmittance at the boresight angle is 90 percent or less.

45. An apparatus in accordance with claim 39, wherein the Fresnel transmittance at the boresight angle is 80 percent or less.

46. An apparatus in accordance with claim 39, wherein the Fresnel transmittance at the boresight angle is 70 percent or less.

47. An apparatus in accordance with claim 39, wherein the boresight angle is at least 60 degrees.

48. An apparatus in accordance with claim 39, wherein the boresight angle is at least 70 degrees.

49. An apparatus in accordance with claim 39, further comprising a dispersion element, the dispersion element being located in the radiation path between the window system and the radiation detector.

50. An apparatus for determining a direction of radiation comprising:

a window system for transmitting the radiation, the window system having a window system optical axis, the window system having Fresnel transmittance properties, the window system being configured such that if the radiation is parallel to the window system optical axis, the radiation is incident upon a surface of the window system at a boresight angle such that an instantaneous rate of change of the Fresnel transmittance as a function of angle of incidence at the boresight angle is significantly different from zero;

two radiation detectors for detecting the radiation, the two radiation detectors being positioned relative to the window system so as to receive the radiation after transmission of the radiation through the window system, each of the two radiation detectors generating a respective detection signal; and

a processor for processing the one or more detection signals, the processor being adapted to determine the relative direction of the radiation in one dimension with respect to the window system optical axis based upon the respective detection signals.

51. An apparatus in accordance with claim 50, further comprising a lens system, the lens system for focusing the radiation on the radiation detectors, the lens system being located between the window system and the radiation detectors.

52. An apparatus in accordance with claim 50, further comprising a field of view limiter for limiting a field of view of the radiation detectors.

53. An apparatus in accordance with claim 50, wherein each of the radiation detectors is adapted to detect an optical monopulse.

54. An apparatus in accordance with claim 50, wherein each of the radiation detectors includes an optical bandwidth filter for transmitting a wavelength corresponding

to the radiation, the optical bandwidth filter for substantially blocking wavelengths not corresponding to the radiation.

55. An apparatus in accordance with claim 50, wherein the Fresnel transmittance at the boresight angle is 90 percent or less.

56. An apparatus in accordance with claim 50, wherein the Fresnel transmittance at the boresight angle is 80 percent or less.

57. An apparatus in accordance with claim 50, wherein the Fresnel transmittance at the boresight angle is 70 percent or less.

58. An apparatus in accordance with claim 50, wherein the boresight angle is at least 60 degrees.

59. An apparatus in accordance with claim 50, wherein the boresight angle is at least 70 degrees.

60. An apparatus in accordance with claim 50, further comprising a dispersion element, the dispersion element being located in the radiation path between the window system and the radiation detectors.